MIDWESTERN REGIONAL LIBRARY SERVICE LIBRARY SERVICES CENTRE

REVIEW

The Ontario Ministry of Citizenship and Culture

MIDWESTERN REGIONAL LIBRARY SERVICE LIBRARY SERVICES CENTRE REVIEW

Prepared for the
Ministry of Citizenship and Culture,
Libraries and Community Information Branch by
Currie, Coopers and Lybrand

Ontario Ministry of Citizenship and Culture
77 Bloor Street West
Toronto, Canada
M7A 2R9

Published by the Libraries and
Community Information Branch,
Ministry of Citizenship and
Culture.
Printed by the Queen's Printer
for Ontario, Province of Ontario,
Toronto, Canada

Copyright 1984 Government of Ontario
D1512 10/84 200
ISBN-0-7743-9701-2

MINISTRY OF CITIZENSHIP AND CULTURE

COMPREHENSIVE REVIEW OF THE LIBRARY SERVICES CENTRE

TABLE OF CONTENTS

		Page No.
I.	INTRODUCTION	1
II.	SCOPE OF THE REVIEW	2
III.	LSC FROM THE INSIDE	5
	A. SUMMARY BACKGROUND OF LSC	5
	B. ACQUISITION SERVICES	6
	C. PROCESSING SERVICES	7
	D. OTHER SERVICES	8
	E. ORGANIZATION	9
	F. STAFFING	10
	G. MANAGEMENT PRACTICES	11
	H. ECONOMIC STRUCTURE OF LSC	12
	1. Processing Services	13
	2. Acquisition Services	15
	3. Capital Structure	16
IV.	LSC FROM THE OUTSIDE	19
	A. APPROACH TO THE SURVEY OF PARTICIPATING LIBRARIES	19
	1. Composition of the Survey Group	19
	2. Conduct of the Survey	22
	B. RESULTS OF THE SURVEY	24
	1. Services and Competition	24
	2. Automation Forecast	25
	3. Pricing Preferences and Buying Intentions	26
	4. Other Findings	27
	C. SURVEY OF BOOK DISTRIBUTORS	29
V.	EVALUATION OF ALTERNATIVES	31
	A. BASE LINE PROJECTION	32
	B. CATALOGUING AUTOMATION REVIEW	34
	C. PROJECTED IMPACT OF THE UTLAS MODEL	38

TABLE OF CONTENTS (CONT'D.)

		Page No.
VI.	RECOMMENDATIONS	41
A.	INTERIM RECOMMENDATIONS	42
1.	Immediate Recommendations: 3 Months Preceding Year 1	43
2.	Intermediate Recommendations: Next 6 months	46
3.	Balance of First Full Year	47
B.	ORGANIZATION: STRATEGIC ISSUES AND LONG TERM PROSPECTS	48
C.	ORGANIZATION AS A FREE-STANDING ENTERPRISE	53
1.	A National Not-For-Profit Organization	53
2.	Board, Committee, and Internal Organization	54

LIST OF FIGURES

Figure 1 - Processing Prices Projected	Opposite Page 40
Figure 2 - Merger Effects Compared	Opposite Page 52
Figure 3 - Functional View of Proposed Board, Commiteee, and Management Structure of LSC	Opposite Page 55

I. INTRODUCTION

The comprehensive review of the Library Services Centre (LSC) funded by the Ministry of Citizenship and Culture has now been completed in accordance with the terms of reference attached as Appendix I.

The principal findings and recommendations have been reviewed with the Liaison Committee and have received their support. Their terms of reference and membership are attached as Appendix II.

The Board of the Midwestern Library system has also reviewed these recommendations and has authorized the implementation of the most urgent by management, under the direction of a special committee of the Board.

The library community has also been exposed to the direction of the study through a questionnaire which shared many findings with them in order to promote informed responses to issues such as:

- price sensitivity,
- market trends,
- automation trends,
- acceptability of new price structures, and
- organizational options.

Many of our most important recommendations are based on these responses from the market and should therefore enjoy the support of the libraries surveyed, who represented nearly 80% of the service volume of LSC.

The report which follows remains faithful in all respects to the main thrust of the above communications, although minor refinements to some figures and details have been made to reflect feed-back from the management of LSC, and the other parties concerned. In the following sections of our report we present the scope of our review, the main findings and conclusions, and the recommendations.

II. SCOPE OF THE REVIEW

The main activities carried out during the review included the following:

- a comprehensive review of the internal operations, organization, staffing, services, computer systems, financial controls, management controls, and economic performance of LSC;
- extensive analysis and restructuring of financial, statistical, and cost accounting data for the last four calendar years;
- development of a computer model for the evaluation of sensitivity to important trends and for the assessment of structural and economic alternatives;
- survey of 30 participating libraries, representing one third of the total by number and 80% of the total volume of business of LSC;

- survey of 15 publishers/distributors, supplying LSC;
- preliminary assessment of the main automated cataloguing options available to LSC, partly as a by-product of a concurrent study for the University of Toronto;
- more detailed assessment, field review, and reference checking in regard to the operational and economic feasibility of the most practical automation option;
- conduct of regular review meetings with LSC management, Ministry officials, and the Liaison Committee; and
- review of the extensive literature supplied partly by Ministry officials, partly by LSC, partly through our own research and experience, and partly through the submissions of many interested parties including PLUG, the participating libraries user group.

The scope, depth and detail required in the review has exceeded that initially expected, as has the frequency and degree of communication with the many parties at interest. We acknowledge with gratitude the many busy people from the library community, the publishing industry, the Liaison Committee and PLUG who contributed time, thought and effort to the study, reflecting their genuine interest in, and commitment to, the continuation of LSC.

The scope of the review noted above produced findings and conclusions which are grouped below under three main headings:

- LSC from the inside;
- LSC from the outside, and
- assessment of alternatives.

This logical sequence does not, of course, reflect actual experience during the study. Findings did not necessarily arise in the order implied by the above arrangement and many interim hypotheses were developed, tested, and refined or rejected based on later work.

This is particularly relevant in regard to many cost accounting and cost prediction efforts as we expanded our computer model to reflect new data from the market, from deeper analysis of operations, or from insights obtained from the model itself. For example, there are minor differences in unit costs quoted in the market survey instrument, which obviously preceded the availability of market data, and those appearing in other parts of this report.

The choice was made to preserve these apparent cost variations as they appeared in published documents rather than to re-write history. In fact, all historical costs quoted in this report do reconcile to the calendar year financial statements of LSC for the relevant periods. The degree of variation is therefore confined to the division of historical costs between units.

The findings resulting from our internal review of LSC are presented in the next section.

III. LSC FROM THE INSIDE

Following a first meeting with the Liaison Committee in October, we began our work at LSC by reviewing the organization and staffing arrangements, interviewing key personnel, examining operational flows on the premises and assigning data collection tasks to appropriate "volunteers". We are grateful to the management and staff of LSC for their assistance during the study and conscious of the speed with which they adopted and implemented many practical suggestions during its course. This effort continued until early January when our main focus shifted to the market view of LSC, although work at LSC went on until late March in connection with data requirements for the computer model. Main findings arising from this phase of the study are set out below.

A. SUMMARY BACKGROUND OF LSC

Management presented us with a volume of 23 documents at the outset of the study which was most helpful in gaining an immediate appreciation of the scope and scale of operations at LSC. As an introduction to our findings we have organized some of this material into Appendix III attached which includes the following items:

- names and function of key staff
- organization chart
- total staff
- services provided
- list of participating libraries
- list of publishers
- average book prices, July 1983
- pricing schedule, 1983
- 1982/83 annual report
- computer facility description

Other items of real value which are not included here because of their general availability and their bulk were: the November, 1982 study of cataloguing automation by John Smith: the November, 1981 analysis of operations by Ward Mallete: the split order test carried out by Barrie and Owen Sound public libraries between August, 1980 and May 31, 1981: the quality of service study concluded by Midwestern Library system in June 1982, and the Inter-Library Loan and Communication System report by Clint Lawson of September, 1982.

These matters are noted here to provide a context against which the findings arising from our study can be viewed.

B. ACQUISITION SERVICES

All the public libraries using LSC benefit from the provision of book acquisition services as defined in detail in Appendix III. The major influence in deciding what these services should be has been PLUG, the participating libraries users group, who also provide the volunteer support staff who edit, (ZIP), the various selection lists which are sent to libraries for two main reasons:

- to aid in collection development by the library, a service of particular value to the smaller library, and

- to encourage scheduled ordering practices which have worthwhile economic benefits reflected in:

- cheaper order entry at LSC,
- cheaper order handling by the distributors, and
- most importantly, reduced cataloguing costs, by spreading these over the largest possible number of copies.

The libraries using this service enjoy the simplicity and economy of dealing with a single supplier for a major component of their book purchases, a better level of service than could be obtained individually, and the benefits of a well-designed computer system which none could afford alone.

In addition, ancilliary fund accounting, order follow-up, and other services are available, not forgetting friendly and convenient credit terms, a luxury which LSC may not be able to offer to the same degree in the future. Similar benefits, mutatis mutandis, are also experienced by the book distributors and publishers who deal with LSC. On both sides, hard savings in paperwork costs are undoubtedly made although the study did not attempt to measure these.

C. PROCESSING SERVICES

Most but not all libraries also use the processing services provided by LSC. At the current time, these are not computerized, although they benefit from the computer system indirectly through the computerized order scheduling process and the ability to identify titles which have been previously catalogued. These services include:

- cataloguing of the book,
- preparation of catalogue card sets,
- attaching spine labels and book pockets, and
- covering the book ready for the shelf.

The mixture of skills involved includes professional cataloguing, typing, printing, and book preparation. It is doubtful if any small library could duplicate the range of skills needed to accomplish these tasks with efficiency even if their volumes of work were large enough to provide the regular practice needed to maintain the skill level.

The main deficiency in this service is its current inability to provide machine-readable catalogue data, a major concern for the future.

A more complete description of the above two main services is contained on Pages 1 to 6 of the LSC Patron Survey, attached as part of Appendix V.

D. OTHER SERVICES

LSC also provides the computer services needed to operate the Inter-Library Loan System on behalf of those libraries involved in this activity. Costs are recovered in this respect but as the activity has little financial impact on LSC, it was not analyzed further. Because of its importance to the libraries, it is included in all future scenarios.

Some note should also be taken of the intangible but real contribution made by LSC in providing a vehicle for cooperative planning and resource sharing among participating libraries. The above is only one instance. Others include the sharing of transportation resources, the volunteer editing of trade catalogues, and the increasing emergence of LSC practices as the de facto standard among participating libraries. Without the focal point provided by LSC this degree of cooperation would be difficult to obtain. The full effects of this informal role will become increasingly evident as more libraries face up to automation with its rigorous demands for standardization.

E. ORGANIZATION

We found the organization clearly defined, well understood, and directly related to the purposes for which LSC had been founded and operated. While in a future of increased independence and competitiveness, more overt recognition of the marketing function may be needed, current arrangements are practical, inexpensive, and well supported by sales and training aids, as well as an active word of mouth network. Evidence of this is to be found in the four libraries who joined LSC during the course of our study, in spite of the uncertainties which this had inevitably created.

Some resources are shared with Midwestern Region at the management level and in the delivery function but these are on a full cost recovery basis with no subsidization in either direction. These arrangements operate to the benefit of both parties and should be preserved in the future, except for the general management role which should be undivided.

F. STAFFING

Staffing of management positions is strong at the top and in the production and computer areas, although we worry particularly about the long-run durability of the current part-time arrangements in the computer area, and, more generally, about the exposure of LSC to the loss of any of this very small group of key personnel. Given the size of LSC, this fragility is inevitable, unless a merger partner can be found.

The head of cataloguing began work as our study commenced, so that our exposure to his accomplishments and his reputation in the library community has been much less than to other senior staff. His professional qualifications and prior experience are appropriate although he appears, like ourselves, to have found LSC more complex and demanding than is evident from a casual inspection. Given his relatively short exposure on the job he will clearly need assistance from more senior management in accomplishing the major changes to his area which are recommended in this report.

The business manager has done a reasonable job in meeting the financial reporting and control needs of LSC to date and has been helpful in gathering needed data for our study. However, his lack of experience and training in cost analysis and accounting has become evident to us during the study and this will make it extremely difficult for him to implement, refine, and maintain the much more sophisticated costing systems required for the independent commercial operation foreseen for LSC. In particular, advanced analytical and interpretative

skills will be needed to support management in pricing and capitalization decisions which will be more consequential than before. These skills take time to develop. Support and training in this area will be needed and is not available from inside the organization.

Staff at the working level are generally well qualified, have long continuity of service, good morale, and strong commitment to LSC. Their efforts are supplemented by extensive use of part-time staff on a second shift basis. This makes effective use of limited premises but carries some penalties in labour efficiency. Predicted volumes and other changes will reduce the degree of dependency on this resource but the cyclical patterns of demand will continue to justify its use to some degree. It has certainly served LSC well in the past and has been more cost effective than the development of a larger complement of full-time staff.

G. MANAGEMENT PRACTICES

Management practices in personnel, production, customer service and communication, statistical and financial control, quality control and general operation were clearly more developed than might have been expected from the scale of LSC and its history as a subsidized operation. The best evidence for this view lies in the bottom line. LSC has been able to keep its rate of increase in costs below the general level of inflation for the years that are reported in this study, an accomplishment that many businesses might envy.

Without taking away from the fact that LSC's management practices have exceeded the strict requirements of their past situation, their unit cost accounting data fell far below that needed to assess and to measure the complex dynamics of their business. This judgement should be tempered by the fact that the operation is close to unique, and in a field where mature cost analysis is almost unknown and much of the literature is irrelevant or misleading. This may become more evident from our review of the economics of LSC below.

H. ECONOMIC STRUCTURE OF LSC

While the complex internal cost-price-volume relationships at LSC are understood at the intuitive level by senior management, the instruments to measure their effects and interactions were not in place. Indeed until our study was authorized, there would have been little reason to develop such instruments at anything resembling the level required by the strategic issues raised by the terms of reference. This became the most significant challenge of the assignment, given the absence of a credible literature, a comparable organization, and the inherent complexity and cyclical volumes of the business.

It could not have succeeded at all in a reasonable time frame without the contribution made by the cataloguing cost analysis appended to the study of cataloguing automation in 1982 by John Smith, former head of cataloguing at LSC. While imperfect in a technical sense due to limitations of sample size, perhaps caused by constraints of time and resources, these data were tested and found to be the best available predictors of cost behaviour in the complex and crucial area of cataloguing.

Detailed findings and questions for the future in regard to the price/cost performance of LSC are contained in the LSC Patron Survey, Appendix V, Pages 7 to 12. These are summarized briefly below.

1. Processing Services

- Cataloguing and the production of card sets are the main cost components.

- These are very sensitive to:

  - the kind of book, whether fiction or non-fiction
  - the kind of cataloguing effort, whether original, derived, or added, and to
  - the ratio between individual titles catalogued and the number of volumes of the same title processed at the same time. (The volume/title ratio)

- Trends noted in the data included:

  - unfavourable decline in the volume/title ratio over four years, a trend beyond the control of either LSC or the participating libraries, although it may be amplified by the poor order schedule discipline practised by some libraries

  - 30 libraries out of 90 account for 80% of the volume of processing business of LSC

- analysis of processing business with these libraries revealed a number whose direct processing costs exceeded the revenue generated. In effect, these libraries were being subsidized by other participants who enjoyed more favourable ratios. This situation would be perpetuated unless more differential pricing were adopted instead of the current practice of averaging all but fiction/non-fiction differentials. See Appendix V or Section IV.A.1. below, for details.

- the volume of added titles, the cheapest cataloguing type, has been growing over the last four years at a rate which partially off-sets the above unfavourable trends. Prudence and reason equally suggest this growth must shortly decline and then terminate.

- The processing function is labour-intensive and for this reason is less affected by volume shifts, favourably or unfavourably, than acquisitions.

- In spite of the above mixture of interacting trends, processing costs have grown at a rate significantly less than inflation.

- Prices have always lagged behind costs but have been rising at a faster rate as management moved towards the goal of financial self-sufficiency.

- Whether libraries pay on the basis of price or of cost, the service remains much cheaper than they could provide for themselves, even in the unlikely event that they could perform at an equal standard of quality and efficiency. This is because LSC can spread its cataloguing costs over an average quantity of volumes which is 2.5 times greater than that enjoyed by the average of its 30 largest libraries. For the smaller libraries the advantages are even greater.

- These advantages will diminish for those libraries who are implementing automation of the circulation and catalogue access functions as they will encounter data conversion costs in regard to the card sets currently supplied. One customer has already announced the intention of leaving LSC for this reason, and more will follow, the largest first. Cost effects will be unfavourable for both services.

2. Acquisition Services

- These are very highly computerized and consequently benefit more from upward shifts in volume than processing due to the higher fixed cost component in the service. They also suffer more from volume declines and because most libraries prefer to take both services, and because they share common overheads with processing, are likely to suffer a greater cost impact from loss of customers than processing, even if less acquisition business is lost.

- While costs do vary depending on the style of buying, and the degree of adherence to order schedules followed by the libraries, this is less extreme than in processing. Accordingly, it is ignored here, although it is included in the computer model and used in cost/price assessments.

- It is worth noting that the computer system which lies at the heart of this service is well designed and comparable to many first rate commercial systems. It has been the subject of continuous enhancements which have improved the services available to the libraries.

3. Capital Structure

LSC is currently a part of Midwestern Region so that a formal capital structure independent of the region does not really exist. However, the arrangements are reasonably clear and the most important details follow.

- The building is owned by Midwestern and the associated costs are charged to LSC on the basis of space occupied. This arrangement is fair and reasonable to both sides.

- The computer and other minor capital items are owned by the region, and charged on a basis which will amortize the capital costs at a commercial rate of interest over a five-year period, beginning in 1983. This includes the unamortized balance of the computer equipment, prior to its up-grade in 1983, thus extending its useful life from original acquisition, to 7 years. We find this treatment reasonable in the circumstances.

- The way in which we elected to analyze the financial affairs of LSC eliminated the cost of books themselves from revenue and expenses as this off-setting item tended to obscure concentration on those costs which LSC can really control, both from management and customers. However, it is a real influence in computing working capital needs, particularly as LSC provides accommodating credit terms to meet the funding peculiarities of libraries, and because the business cycle has two main buying peaks. Lack of historical data has made it difficult to be precise in this area of our study, but our best estimate indicates that LSC has an average requirement of about $400,000, with a low of about $250,000, and a peak of between $500,000 and $600,000. Most of this is furnished by accounts called "Accumulated Net Revenue", and "Reserve for Capital Acquisitions", and "Reserve for Library Services Centre" on the books. These amount to something less than the average requirement above. We have assumed that the peak requirement above is in practice met by utilizing the operating grants provided to the region, in accordance with explanations given by management. Past subsidies to LSC have also helped in this area.

- We note in reviewing the above arrangements that except for the computer equipment, LSC has benefitted from more generous arrangements in regard to accommodation and working capital than would be available to a private commercial business. These benefits have flowed through to the libraries which is appropriate. We have assumed the continuation of these arrangements in the future, except for the reliance on regional operating grants. There will be some important decisions to be made by the parties at interest in this area.

The above observations are made against a context which contemplates the establishment of LSC as a financially independent entity. It should not be forgotten that this is not the context against which LSC was founded and operated. Indeed against the only fair measure of performance, that of a subsidized body, LSC has been operated with a degree of financial prudence, approaching parsimony, which is exceptional in our experience. This appears to be due in part to a strong, business-oriented board of directors and in part to senior management.

In this section we have reviewed the main findings arising from our internal review of LSC. These raised questions which could not be answered from the inside. How was LSC seen by its participating libraries and by its suppliers? How would they react to the changes implied in placing LSC on a full cost-recovery basis? How imminent is the move towards automation? These and other questions form the subject of Section IV which follows.

IV. LSC FROM THE OUTSIDE

This section of our report reviews our approach to the survey of participating libraries and summarizes the key findings which resulted. This is followed by similar details in regard to our survey of book suppliers.

A. APPROACH TO THE SURVEY OF PARTICIPATING LIBRARIES

We had already identified the areas where the view from the marketplace was crucial to the future of LSC as noted in Section III above. At this time two further questions arose: How should we choose respondents, and how should the questions be asked? These issues are now addressed.

1. Composition of the Survey Group

A review of customer buying patterns had already been completed and is submitted as Appendix IV. This compares the procurement patterns of the top 28 libraries for the year 1982, the last available complete year, as shown in the public library statistics published by the Province of Ontario to the same data from the internal records of LSC. The data has some obvious anomalies, due to differences in reporting periods and to differences between fund accounting and actual procurement periods, but it proved adequate for our needs.

The raw data thus obtained was then analyzed by computer to derive the following findings about the intended survey group.

- Volume/title ratios varied from a low of 1.006 in Newcastle to a high of 3.096 in Huron County with an average of 1.540 overall. As already noted in Section III above, this means that all member libraries benefit from sharing cataloguing costs through LSC.

- The share of total book expenditures enjoyed by LSC was then computed for each library in terms of units (volumes), and dollars. The average for units was 69.6%, and for dollars was 74.3%, possibly reflecting a tendency for libraries to obtain their less expensive paper-backs elsewhere. The spread around the averages reflects the inclusion of libraries who buy nearly all their requirements from LSC, and of libraries who buy very selectively from LSC and make use of competing services as well. Two libraries who do not buy processing services at all were included in this latter group. The range of populations served indicates the inclusion of libraries which are very small as well as the largest.

- The ratio of single volumes to total volumes purchased by each library was computed as a partial measure of the degree of marginal contribution or loss experienced by LSC through dealing with each. This was significant. The net contribution of LSC's major customers came to only $4,864 in total, after deducting the marginal losses occasioned by others, in the amount of $22,015. While the incidence of singles is beyond the control of any one, this point suggested the need to consider

differential pricing as a means of reducing the inadvertent cross-subsidization currently occurring between libraries.

At the request of LSC, two more libraries were added to the above sample of 28 for a total of 30, representing about 80% of the total revenue of LSC. The diversity of the group as revealed by our analysis, suggested that we would also cover most shades of opinion present in the library community.

Appendix IV and the associated findings were reviewed with the Liaison Committee, conveyed to the survey respondents as part of the survey documentation, and discussed with those who attended the briefing meetings which are described below. The sensitivity of LSC to library buying patterns, and the variability of these patterns between libraries and within a library from time to time has thus been extensively confirmed. Tracking and reporting such data on a continuing basis can therefore be important to LSC and to its customers, because of its impact on the cost/price structure. Many respondents made this point, which we fully support. It is also noted that this suggests a basis for improving the utility of the public library statistics published by the Province of Ontario.

2. Conduct of the Survey

The survey instrument contained in Appendix V was first prepared in draft for review by the Liaison Committee. Following this it was reviewed with the management of LSC and the resulting amendments incorporated before it was mailed to the respondents listed in Appendix IV. A copy of the covering letter is included with Appendix V.

Examination of the survey instrument will reveal that it amounts to an interim report of our findings to this point in the study, and suggests quite clearly the main options faced by LSC and by its customers. While there is an obvious risk of "leading the witness" in this approach, in our opinion this was far outweighed by the need to assure, as far as possible, that the respondents had a clear understanding of the issues before they were asked to commit their votes. This was of particular importance, given the degree of protagonist debate and rumour which had preceded this study.

The issues contained in the survey are both complex and crucial. Accordingly, three meetings were arranged at which small groups of respondents were given the opportunity to review the instrument in detail with the consultant. 23 of the 30 respondents spent several hours at these meetings, some at considerable inconvenience and all at the expense of their library. All were senior personnel and the questions raised by them were astute and pointed. Attitudes towards the LSC were positive but not sentimental, and the written responses later confirmed these impressions.

Many of the remaining respondents telephoned to pursue their inquiries with the consultant before submitting their responses. The final response rate was 100% and the quality of the responses was exceptional, often going far beyond the strict requirements of the survey to make constructive suggestions.

Because of the efforts made by the libraries to respond maturely to the survey and because of the specific nature of the key questions, we believe the findings from the survey can be approached with unusual confidence. We table here for the benefit of the management of LSC the suggestion of many respondents that the information conveyed in the survey instrument should be made available to them on a regular basis in future, not only so that they can see how LSC is doing, but also so that they can see the impact of their own actions on LSC and the other members of this cooperative entity.

As already noted in this report, and in the survey instrument itself, the data used was inexact and preliminary. This was done in order to avoid the delays involved in further data refinement. This judgement was given added weight by the fact that such refinements could only be applied to historical costs, for without market data, no rational basis existed to predict future costs given the complex economic structure of LSC. We are pleased to confirm that later refinements have not altered major trends or relationships indicated by this initial data. Judgements made on this basis therefore continue to be valid.

B. RESULTS OF THE SURVEY

The responses obtained in regard to the scope, the appropriateness, the quality, the timeliness, the relative importance, the performance, and the competitiveness of the two main services, are quite unambiguous. Full justice to the many constructive comments added by most participants cannot be achieved by numeric treatments of the data from this part of the survey, (Pages 2 through 6). Accordingly we plan to strip the identification from individual responses in this area and give these to LSC for their consideration in refining their services for the future. Below we provide the essence of this blend of statistics and commentary, followed by summary findings in regard to the other key issues raised by the survey.

1. Services and Competition

The acquisitions and processing services provided by LSC are strongly supported on all key survey dimensions by the responding libraries. Those few who use, or have recently used, competing services, found them equivalent in cost but generally less responsive or less complete in the facilities available.

Except for Baker & Taylor, the American supplier, who with one strong disagreement from a former user, was by the small number responding to this issue, ranked about equal with LSC in service, and thought to be cheaper. In this latter respect, estimates of cost differential from buying American were hazarded by only 11 respondents: of those, 6 clustered in the range of 15 - 25%.

At the same time, only 3 respondents wanted to buy American, 24 were in favour of continuing to buy Canadian, and 3 were neutral.

In the commentary provided by the libraries there is good support for simplification of services and for more standardization, with the caveat that an important aspect of LSC is its ability to offer a complete service to the smaller library. Typical of such comments were a desire to simplify the Dewey code by truncation, to simplify and standardize cataloguing outputs generally, and to reduce the number and content of request lists by changing the zipping process. None of these are fundamental criticisms but they do offer an opportunity to capitalize on a trend towards simplificaton and standardization which will have increasing value for all member libraries as they approach automation. In fact, without common standards a really useful union catalogue and the full potential reduction in cataloguing and retrospective conversion costs will not be achievable.

2. Automation Forecast

The respondents foresaw a more rapid shift away from the current card catalogue towards machine-readable catalogue data than was anticipated. While 83% saw cards as the favoured medium today less than 20% expected this to be the case five years from now. This finding emphasized our concern than the long run viability of LSC could not be achieved without immediate attention to this critical area. Loss of a major part of their customer base to automation would be tragic for LSC, for the libraries who remain, and would produce sub-optimal results from

automation for those who leave. Accordingly, we expedited our focus on automation options at this point.

Another question in the survey, page 12, presented a brief scenario of potential automation, based on our pessimistic feeling at the time that internal development was probably the only practical route for LSC. In spite of this pessimistic scenario, 93% of the respondents favoured automation of the cataloguing function. In addition, a surprising 70% favoured these costs being borne by all libraries. Several librarians explained their vote in this regard by stating that they felt it important enough to have the automation option available for future use that they were willing to pay for it in advance if necessary. Fortunately, the solution recommended later in this report makes this unecessary. It does however, add weight to our view that the library community when properly consulted and properly informed is capable of mature and long-sighted decisions.

3. Pricing Preferences and Buying Intentions

83% of the respondents supported the concept of pricing services at a level closer to their actual costs rather than averaging prices across the broad categories of fiction/non-fiction in processing, and across all categories of acquisitions.

The same number supported the concept of a surcharge for inefficient use of LSC services. 80% opposed the retention of current average pricing philosophies.

80% were willing to commit to a given level of purchasing, or to a given share of their purchasing dollars, one year in advance. This provides LSC with the opportunity to do more effective planning, budgeting and pricing in the future.

These and the other changes indicated by the survey had no impact on dollar buying intentions. At most, unit volumes would be reduced, to accommodate price increases. No library would leave LSC for this reason alone. Note that this includes the 90% of the respondents who felt that future incremental capital needs should be met and could be met by increasing prices.

The market forecast resulting from summing respondents' estimates suggests that dollar budgets committed by libraries to LSC will remain about the same in total. While one library will be leaving on account of automation intentions, this will be made up by modest increases foreseen by half a dozen others. Units under this scenario will decline proportionately, and unhappily, unfavourable trends in items like volume/title ratio will continue, and favourable trends such as addeds will peak out soon. Future growth must come from adding new libraries, not from increased sales to existing customers.

4. Other Findings

87% oppose closing the centre.

100% favour a strongly business-oriented board of directors, 60% would be willing to serve on such a board.

90% favour strong working committees to carry out such tasks as finance, product development, marketing, and research on a project basis. 80% would be willing to serve on such committees.

Representation of regions attracted only a 36% vote, and library representation received 47%.

90% felt that board members should be chosen primarily, or exclusively on the basis of their ability to contribute to the work, with representional considerations being ignored by 23%, and given secondary status by the remainder.

90% favoured board members being chosen by the participating libraries, or the board itself, once established. 60% favoured approval of the board by the Minister of Citizenship and Culture, the remaining votes being split into insignificant numbers.

All of the above organizational responses, of course, referred to the future organization of LSC as a free-standing, financially independent body.

The survey of participating libraries reported under the above two headings provided essential data and qualitatitive input for the remaining parts of our study. This became the major component in assessing the practicability and the impact of alternative directions, and in formulating the final recommendations. In the survey process we were also able to begin a process of factual communication about LSC with the participating libraries which allayed rumour and unfounded concerns about LSC and the study. In part we believe this contributed to the maturity and reliability of the responses

obtained, although most of this came from the effort and commitment of the respondents themselves. Comments from the participants suggest that some form of continuing dialogue along similar lines to the above survey process can make an important contribution to the maintenance of continued support from the library community.

C. SURVEY OF BOOK DISTRIBUTORS

A much less detailed survey of publishers and book distributors was also done to complete our view of LSC from the outside. This covered a sample of 15 respondents, accounting for about 65% of LSC's purchasing volumes. Eight responded to the survey instrument which is attached, together with the covering letter, and distribution list as Appendix VI.

Responses were less structured than for the library survey but the general thrust was quite clear:

- LSC are now receiving the maximum available discount: this could only be improved if they were to become a commercial distributor, operating without subsidies, in which event they might be able to negotiate a further discount of not more than 4%.

- Public libraries in general receive the same discount as LSC, but are unlikely to obtain anything like the same level of service:

- LSC is highly valued by Canadian distributors as:
  - a convenient, economical, reliable distribution channel to public libraries:
  - a defense against American competition, especially Baker & Taylor, because of their ability to deliver a shelf-ready book:
  - better than the National Book Centre: this being consistent with the split-order test already noted, and with the library survey above.
- LSC is not seen as a substitute for marketing effort by the respondents themselves, but purely as a distribution channel.

It deserves note that UTLAS, a major bibliographic utility also sees LSC as a potential defense against competition from Baker & Taylor and as a potential distribution channel to smaller libraries, which are too costly to serve on an individual basis.

This section of the report has presented the main findings of our surveys of LSC from the outside viewpoints of its customers and of its supliers. The opinions presented here are theirs, not ours, and not those of LSC: an important distinction not always recognized by some of those to whom preliminary versions of this material have been presented. Because this is the market view, we have given it primary importance in evaluating alternatives and developing recommendations later in this report.

The unmistakeable message of this section is that LSC plays a valuable and valued role in book distribution and processing for the public libraries, and the book distributors of Ontario. Of equal importance, and unambiguity are the findings in regard to: a low growth market-place, in contrast to recent years: the unexpected pace and acceptance of automation, with its associated threat of loss of major customers: the understanding, and acceptance of the need for differential pricing, and the willingness of the libraries to accept the financial consequences of an unsubsidized LSC in return for a voice in its governance.

It had become clear that LSC enjoys the support necessary to its survival as an independent organization. Once this fundamental issue had been laid to rest, our study was able to focus on how best to accomplish this, within the parameters set by the findings laid out in this and the preceding section of this report. This topic is covered in the next section.

V. EVALUATION OF ALTERNATIVES

Four main questions were addressed in this part of our study:

- What did LSC look like if we did nothing more than apply the market data, the assumed end to subsidization, the incremental capital needs for independent operation, the start-up costs for this, and the many mix and trend factors noted above to project the next two years of operation, without considering automation?

- What automation alternatives were available and which seemed most appropriate, given LSC's customer base and limited human and financial resources?

- What impact would this automation alternative have on LSC and its customers financially as compared to the do nothing alternative considered in the first question above?

- In regard to both the do nothing and the automation alternative, what range of differential prices would be needed to break-even, and how many different kinds of prices would be needed? Would differential pricing really be needed under automation?

These four main questions are addressed under the following three headings:

A. BASE-LINE PROJECTION

We first began our evaluation of alternatives by developing a computer model of the financial structure of LSC as refined and modified by our detailed evaluation of appropriate cost measurement needs. This required a major restructuring of the available data and many estimates by management where data was unobtainable from historic records. We elected to use calendar years as being more natural for the library business cycle than a March year-end, and also because we had more audited records available to us. Once constructed, the model was first normalized by reconciling its results to three years of LSC history, and the detailed unit costs were reviewed with management for reasonableness. As noted this gave us very slightly different unit costs for acquisition and processing services than had been used in the survey instrument in the preceding section of this report. This did not exceed a few cents in the worst case for the three years, 1981, 1982 and 1983. Trends remained accurate.

The next step was to incorporate two main sets of data in order to forecast the probable future financial performance of LSC for two years into the future. While we labelled these as 1984, and 1985 respectively for convenience, we recognize that in fact, these merely represent two 12 month periods, beginning subsequent to the adoption of our recommendations. The models will accordingly require some adjustment at that time to reflect any changes which have occurred in the meantime. This is most likely to be an increased deficit, although the Board of Midwestern has shown initiative in implementing an interim price increase at our recommendation to reduce this as much as possible.

The two sets of data were: the revenue, unit volume, and trend data arising from the market survey, and the capitalization and start-up assumptions connected with placing LSC on a financially independent footing. The model was then run to produce two sets of projections: one on the existing average price basis, one on a differential price basis. Both versions predicate a break-even situation.

A fuller description of the structure of the model and its operation is contained in Appendix VII, attached. The model itself has been conveyed to LSC for the ongoing use of management in two main ways: in planning, considering alternatives, and supporting rational decision making as we have done, and secondly in restructuring their financial and statistical controls so that actual results can be tracked on the same basis as the planning is done. Detailed print-outs have also been conveyed to them and retained in our working papers but have been excluded from this report because of the commercial risk to LSC of publishing such intimate details of their financial performance.

The results were somewhat discouraging in terms of the rate of price increase required, mainly because the market revenue forecast did not reflect a continuation of the high rate of growth experienced in the last three years at LSC. Future growth at LSC must come from adding new libraries, not from growth in existing library budgets. We did not assume any growth from adding libraries in the model, due to the uncertainty which many libraries had expressed that LSC would be closed down. Prompt dissemination of the positive recommendations of this report is obviously one means to relieve this anxiety which affects potential as well as existing customers. It is for this reason that we have already presented our findings and recommendations in draft to the Liaison Committee and the Board of Midwestern Region.

B. CATALOGUING AUTOMATION REVIEW

We began this part of the study with information from the market study as to which libraries made use of automated cataloguing services, with John Smith's report already noted, with a recent Alberta study of automation available to public libraries, with the Auditor-General's report on the National Library of Canada, and with an evaluation of the Bibliocentre carried out by us for another client at the same time as this study.

This material immediately eliminated the National Library from any further consideration. The Bibliocentre appeared well regarded by its main customers, the community colleges, but the

nature of its collection and specialized market-place, combined with its refusal to quote costs or guarantee important service components, eliminated it from further serious consideration.

A plan for internal development which had been discussed with the senior computer analyst of LSC was then evaluated, based on material already submitted to the Board of Midwestern. While this showed enough merit to have been the basis for our pessimistic estimate of automation costs in the market survey document, it failed to survive deeper examination, for the following main reasons:

- high capital costs:
- two year delivery time frame:
- impact on current equipment, during, and following development:
- shortage of technical expertize, and possible increased dependency on an already limited resource:
- unlikely to provide on-line cataloguing, a key economic factor:
- inability to produce the multiple output media required by the variety of customer situations for the foreseeable future, and
- inability to interface with the multiplicity of computer systems currently or prospectively installed in the public library network.

This led us to consider UTLAS, a bibliographic utility, formerly a part of the University of Toronto, now an independent wholly owned corporation. This option had originally been discounted because of concerns about apparently high costs referred to in the Alberta study, and in UTLAS literature, about an apparent focus on academic libraries, which are very different in their cataloguing needs from public libraries, about the age of their computer equipment, about their past service difficulties, and about their commercial viability.

Our first review addressed the latter, more general concerns, on the basis that cost and functionality are irrelevant unless the viability of the supplier is reasonably assured. We had access to the report of Woods Gordon which had led to the re-organization of UTLAS as an independent commercial entity. We were aware of the formation of a new management team from men of established high reputation in the data processing community, of the granting of a BILD loan, and of the granting of a significant line of credit by a major banking institution. Inquiries among the library community revealed continuing improvements in the level of service, and more significant penetration of the public library market than had been known. In addition major new contracts had been obtained, one, in the U.S., a large public library system, and relevant new services including Telebook access were being offered. New computer equipment with superior on-line capabilities was being installed and management assured us that the installation project is below budget and on schedule.

Our judgement is that, while UTLAS like many high technology companies faces a higher level of risk than older established businesses, it enjoys a market edge, a superior management team, good support from the financial community and broad commitment from a number of public libraries, as well as from an extraordinary number of academic libraries. Accordingly, we judged them as an acceptable supplier of services to LSC, subject to funtionality and cost, which we now proceeded to examine.

We had already acquired a good understanding of the cataloguing process at LSC through our cost study and this was extended by more detailed workflows supplied by LSC. This was compared to a detailed workflow of the UTLAS on-line cataloguing process and major areas of difference isolated. Key questions and concerns to be addressed during our planned field visit were also isolated at this time, and a request for information and detailed costing algorithms was issued to UTLAS.

A field visit was then arranged to St. Catharines where the Director, and the Head of Technical Services spent a full day reviewing their five years of experience of UTLAS with us, and with the Head of Cataloguing, and the General Manager of LSC. This library was selected from the respondents to the market survey not by reference to UTLAS, and we are grateful for their kindness in replying to our many questions.

Their experience is relevant to LSC and extends through the period when UTLAS was in difficulty with its level of service. First-rate cost records and controls have been maintained for all five years. These were made available to us, and were used to evaluate the cost estimates submitted by UTLAS independently. The degree of correlation between actual

experience at St. Catharines and these estimates was extremely high.

The LSC evaluation team then spent a full day at UTLAS, reviewing the services and testing various transactions on their terminals, before arranging for a pilot test on the premises at LSC for a few days, beginning April 30, 1984. This was successful and UTLAS personnel independently conveyed to us their view that LSC cataloguing personnel were generally better than average in their ability to grasp this new technology, and that one was exceptional.

Our cost analyst spent a day at UTLAS investigating costs and processes as a preliminary to developing the computer model needed to compare automation cost performance with the base-line projection already in hand. The findings of this process are presented under the next heading.

C. PROJECTED IMPACT OF THE UTLAS MODEL

As noted in Appendix VI attached, the UTLAS model incorporates exactly the same assumptions as the baseline model in regard to volume of business, mix, and labour costs, as well as the same assumptions in regard to the reorganization costs and their amortization. The comparison therefore slightly favours the baseline model for the reason that we can assume from the market survey that the lesser costs of the UTLAS model would not result in savings by the libraries but in the purchase of more books from LSC.

With this exception, the UTLAS model mirrors the same world as the baseline but gives effect to the changes in the cataloguing

process occasioned by the substitution of automated cataloguing for the current labour intensive process. Once the implementation costs of UTLAS have been absorbed, and the volume of added cataloguing has returned to current levels, the UTLAS solution will be about 30% less expensive than the current system. Even at inception it will be about 15% less costly. However, while the spread between full recovery prices for processing products is reduced by UTLAS to $7.00 from $11.00, it is our judgement that this spread still requires differential pricing.

Given our opinion that automated cataloguing was a matter of survival for LSC and the expressed willingness of libraries to pay for access to automation, we would have been willing to recommend a practical solution even at a higher cost. We could have justified this on the basis of savings to automated libraries through the elimination of the data conversion costs associated with the current catalogue cards.

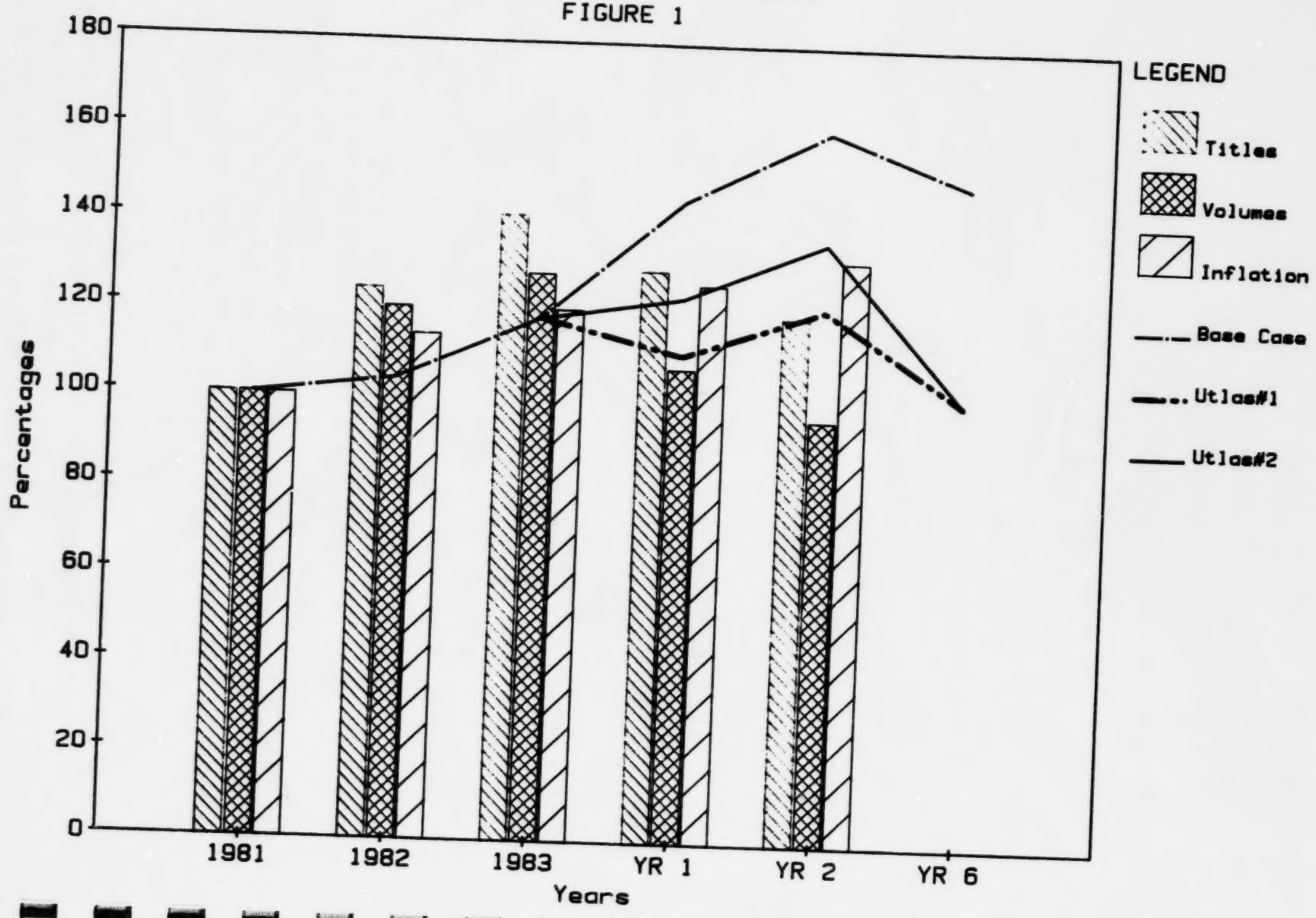
A feeling of urgency led us to present these findings to officials of the Ministry of Citizenship and Culture, to the Liaison Committee, and to the Board of Midwestern Region with draft short-run recommendations aimed at prompt implementation of the UTLAS system in order to achieve the vital benefits in costs and services as soon as possible. This has now begun under the direction of a special committee of the board and with the enthusiastic support of LSC management and staff. Copies of our presentation material are in the hands of the above and in our working paper file.

Since then we have had the opportunity to review the implementation plans in detail with management and have agreed to a number of practical adjustments to the broad assumptions contained in our model. These have affected the figures in our

PROCESSING PRICES PROJECTED: 1981=100%

Base Case Vs UTLAS Models

FIGURE 1



presentation to some degree as these refer to the implementation period, without affecting the validity of the concept. These adjustments were anticipated in our presentation and have since been conveyed to the Midwestern Board prior to their approval of our recommendation.

In Figure 1 opposite, we summarize some of the main results of the computer analysis of LSC in terms of the average price effect of various scenarios on the participating libraries. Numbers are expressed in terms of 1981 as a base year, to preserve the confidentiality of actual values. It will be noted that volumes and titles grew from 1981 to 1983, although volume/title ratios had begun to decline. In Year 1 and 2, forecast unit volumes are consistent with the market survey, accounting for part of the increase in unit price levels; the remainder arises from the costs of independence, i.e., reorganization costs, loss of operating grants, and the progressive build-up of needed extra working capital. In addition, UTLAS Models 1 and 2 also reflect the amortization of implementation costs for UTLAS over a 5-year period. #1 was our initial model prior to discussion with LSC management, #2 reflects the changes made to accommodate their suggestions.

Year 6 reflects the impact on all models at Year 2 volumes, of the complete amortization of implementation and capital acquisition costs. The UTLAS cases reflect the straight line amortization of the cost of "ADDEDS", rather than the diminishing balance of actual experience in order to provide improved price consistency over the period of amortization. By Year 6, UTLAS #1 and #2 coincide.

Stepping back from the detail implied by the model and its many assumptions about the future, we believe in a practical sense that management at LSC can realistically be asked to achieve a successful implementation of automated cataloguing at LSC within a year of beginning at a cost somewhat less than would be required to continue with manual methods. In the following years they can focus on achieving the full savings potential which they and we are confident exists. In fact this estimate should prove conservative because we believe that automated cataloguing combined with their fine reputation and the elimination of doubts in the marketplace about their survival will attract new libraries and lead to further growth and economies of scale.

This section concludes our presentation of the main findings of our study and has indicated that our reasons for promoting early implementation of an automated cataloguing system at LSC were to eliminate the threat of losing customers, to improve the availability of access to automation for LSC customers, and to obtain unexpected but worthwhile cost savings as early as possible.

VI. RECOMMENDATIONS

The most urgent of our recommendations, namely to convert to the UTLAS system of automated cataloguing, has already been

explained, and is being actively pursued. Some other recommendations, which are either related to this or related to preparation for independent operation, have also been made. All of these are summarized below under the heading of interim recommendations.

This is then followed by our recommendations in regard to organization structure and long-run directions for the further development of LSC as a service to smaller public libraries across Canada.

A. INTERIM RECOMMENDATIONS

As conveyed to officials of the Ministry of Citizenship and Culture, the Liaison Committee, and the Board of Midwestern Region, the interim recommendations covered a span of 15 months, and set out a practical action plan for the improvement of operations and controls, for the preparation of revised budgets and pricing strategies, and for the severance of redundant staff. Initial steps towards internal re-organization, determination of working capital needs, communication with customers, and preliminary negotiation of a banking line of credit were also included.

In addition some potential organizational directions were reviewed, but not conclusively. This was felt necessary for two reasons: to explain the need for some of the interim recommendations, and to provide a basis for informed debate on the organization structure and the governance of LSC which are discussed later. In this way we hoped to obtain the benefits of early implementation of agreed and urgent recommendations

for improvement without prejudice to the deliberation of organizational issues. The effect should also be to relieve any pressure on these deliberations which might otherwise have arisen from failure to attend to crucial operating issues with due dispatch.

These interim recommendations are summarized below and the presentations to the above groups have been preserved in our working papers.

1. Immediate Recommendations: 3 Months Preceding Year 1

The first step is to plan the conversion to UTLAS by determining the detailed steps needed to do this. These include arranging the necessary equipment and supplies, training the staff, converting files, establishing procedures and controls, communicating with customers, and establishing a schedule of events leading to the beginning of the new operation. This has to be managed as a project, while maintaining control over existing operations until these are phased out in an orderly manner.

The implementation and the operating costs of the new system must be estimated and a revised operating budget, cash-flow projection, and price schedules prepared. These latter will be on a differential price basis for both services as already explained, and the budgets will follow the cost accounting structure set out in the supplied computer model. The chart of accounts and account coding scheme will also be revised accordingly and accounting and control procedures

adjusted. These financial tasks should also be defined, scheduled, and managed as a project to assure that they will be in place as needed by management to implement and control these many changes.

The severance arrangements for redundant staff must also be planned carefully to minimize the impact on morale. This in fact has already been done, and, because operations were at a low point when this occurred, the effect on permanent employment has been less than feared.

The current sharing of general management responsibilities at LSC and in Midwestern Region should be discontinued. One man should be clearly and unambiguously held accountable for the above projects and for the on-going operation of LSC. The other should be equally and separately accountable for the region.

The above plan is ambitious but much preparatory work has already been done and is reflected in the computer model. While the figures in the model will be subject to continuing adjustment as more detailed planning is done and practical experience obtained, it will continue to serve as a valuable benchmark for assessing and controlling changes. This has already been established as it has recently been used to assess and incorporate practical refinements suggested by management since they began work on the above recommendations. See Figure 1, facing page 40.

The cost impact of these refinements to date still leaves the UTLAS model substantially ahead of the base model,

even during the first five years of operation, when implementation costs must be recovered and the volume of added titles will return to its present level. On a full cost recovery pricing basis libraries will begin by paying around 14% less for processing services in the first full year of UTLAS than would have been required under current processing methods at the same volume of business. By the fifth year this will have risen to over 30% in constant dollars at equivalent volumes. Because more capacity and flexibility have also been obtained, and because we expect more customers to be added over these years, actual results could better these estimates.

The reader is reminded that these results are true for the model as it has been refined so far. Management decisions yet to be taken can and should continue to affect actual results. For example, it might be decided to add services without charging fully rather than reducing price levels to the maximum possible.

Alternatively, it might be decided to amortize the implementation costs over a ten year period instead of five, or develop a working capital fund over a longer period than the model has assumed. This could reduce the prices required to break even, and actual experience would differ from the study model.

The true value of the model lies in its ability to assist management to quantify the impact of such decisions in advance, to compare forecast results to the original version, and therefore to be able to assess their comparative effects more clearly.

The same capability extends to adjusting operations, costs, and prices to meet factors beyond their control, such as those mentioned in our findings above. In consequence management can be, and can be held, more accountable for financial results than was realistic in the past, if they learn to make wise use of this valuable tool.

We make these observations because the use of models is less common than it might be. Accordingly, those interested in the future of LSC should not expect LSC management to duplicate the exact results used to decide on the relative merits of the base case versus UTLAS. This would be to turn the model into a straight-jacket instead of a step towards greater freedom and confidence in adjusting a dynamic business to a dynamic market.

It would be more reasonable to expect that the actual results obtained will be more understandable, that the decisions taken will be more clearly measurable in their impact on libraries, individually and collectively, and that LSC's pricing and financial performance will be more easily and fully understood than before.

2. Intermediate Recommendations: Next 6 Months

Within about three months we would expect that the final form of organization will have been established and agreed, the legal steps required to implement this will have been put in hand, and working capital and fixed

financing arrangements can then be finalized. During the following six months management will be concluding these arrangements. In addition they will have implemented UTLAS at this point and should be fine- tuning performance, controls, and costs based on feed-back from customers and from their own control system.

The conclusion of this first six months of UTLAS operations, following the three month implementation period, should be marked by a progress report to the board, and, if appropriate, revised plans, targets, and budgets for the balance of the first 12 months of full operation.

Organizational matters are discussed in a later section. Here it is worthwhile to note that many of our recommendations can and should be put in place as early as possible, desirably near the beginning of this intermediate phase of the restructuring.

3. Balance of First Full Year

The last six months of the 12 month period following implementation should continue the refinement and tuning of systems, and of the organizational arrangements set out in a following section of this report. In addition the need for marketing plans should now be addressed, and the necessary recommendations placed before the board. The potential for on-line ordering from the

publishers should be reviewed in the light of UTLAS' capabilities and its TELEBOOK access facility, and a separate recommendation developed in this respect. We have also suggested as explained more fully later that the possibility of a merger with UTLAS be given full consideration early in this period, if it has not already been decided.

This section has described the main accomplishments required of LSC management over the next 15 months if the UTLAS system is to be implemented successfully and its capabilities exploited fully. We expect this implementation to take about 3 months and final tuning to carry on throughout the following year.

We have also described the many other changes in pricing, controls, financial planning, and organization which must be undertaken during this period. We count on the continuing commitment of management and staff and of the Midwestern Board, or their successor, to make this work as they and we believe it can. The findings in regard to the personnel at LSC, and our suggestion that some will require external assistance to fully meet their responsibilities should not be forgotten.

B. ORGANIZATION: STRATEGIC ISSUES AND LONG-TERM PROSPECTS

Long term, LSC can provide a valuable and cost effective service to any public library with a volume/title ratio which lies below about 4.0. In fact this may be conservative, for it assumes that libraries with such ratios will be as efficient as LSC in the specialized functions which it performs and discounts the anticipated benefits of the conversion to UTLAS

technology. For practical purposes, all except the largest urban public libraries in Ontario, and in Canada, can be considered part of the potential market to be served.

In fact, given the forecast from the market survey, the only feasible direction for growth lies in adding new libraries, at least for the foreseeable future. Such additions will benefit existing as well as future customers, because of the cost/volume/profit structure of the operation. This in turn is likely to widen the market appeal of LSC leading in turn to more growth potential.

For this reason we firmly believe that it is no longer appropriate for LSC to remain a part of the Midwestern Regional Library System. At the least the mandate should be extended to cover the Province of Ontario, and desirably the whole country. It is realistic now to think in terms of distributing processing branches to other parts of the province with the idea of reducing book trans-shipment costs. Very shortly it will be feasible to distribute the cataloguing process too, as UTLAS' new computers come into service in September. For those who may find these ideas too ambitious we cite the case of Hospital Medical Records Institute, a similar organization in health care, which has moved from a deficit of $750,000 to solvency in the last few years, and now dominates the Canadian market, against two American competitors who were thoroughly entrenched. It can be done. It has been done.

The main difficulty lying before LSC lies in its size, in its dependence on a limited number of key human resources, and in the difficulty it will experience in attracting and keeping the necessary level of excellence in non-library functions. The most outstanding needs in this regard will be in marketing, finance, and computing, although excellence in library technology must not be discounted.

For its past scale and mode of operation, the organization and management of LSC have been exceptionally good in library, production, and computer functions, and adequate in accounting and bookkeeping arrangements. These arrangements are, however, fragile, and would limit LSC to a pace of growth which may well allow a large share of the market to be pre-empted by inferior solutions and/or American competition. This is against the best interests of the library community, against their preferences as reflected in the market survey, and against the views of the Canadian book publishers, as well as limiting the potential of LSC for job creation in the Province of Ontario.

There are three main ways to grow at the rate implied by the above perception of the opportunities and challenges facing LSC.

- Add the marketing staff and tools needed, aggressively pursue the market, and raise production capacity consistently with demand in order to maintain service levels. Speculative funding beyond that contemplated in the financial model will be needed to do this and significant commercial risk will have to be managed. Financial and general management capabilities will be placed under great strain. If this route were to be adopted, it would be wise to defer marketing and growth plans until the interim recommendations above have been fully and successfully implemented. To be successful a pronounced entrepreneurial attitude will need to be cultivated among staff whose prior orientation has been professional, not an easy transition to accomplish. In our view this route involves delays and uncertainties which it would be prudent to avoid.

- Keep the organization and staff at about the current size, stabilize operations after implementing the interim recommendations above, and then develop it as a franchise operation, or the not-for-profit equivalent. While this may reduce the capital requirements and the risks associated with growth from the viewpoint of LSC, it involves at least equivalent strains on management, marketing, and financial skills. It also presents equivalent or greater delays and equal uncertainties to the previous option. It is questionable whether quality of service can be maintained under this structure. It is equally questionable whether multiple units on a franchise basis might not compound the problem of fragility already mentioned.

- The third way to meet growth objectives under constraints of time, money, and human resources is to seek a merger with a compatible organization, which brings complementary skills and resources to bear. There must also be something in the arrangement which benefits the merger partner. This can include defense of an existing market, penetration of a new market, addition of complementary services which increase the yield from existing distribution facilities and many others. This option is never free from risks either. These may include loss of customers on both sides, acquisition of unfavourable labour agreements, loss of favourable purchasing contracts, and the demoralization of key staff. In our opinion, the merger option offers the lowest degree of risk to LSC, to its customers, to its suppliers, and to its staff among the three directions available for the timely pursuit of challenging growth objectives. We strongly believe that the possibility

MERGER EFFECTS COMPARED

UTLAS	ADVANTAGES	LSC
NO	* Incremental Working Capital not Required	YES
NO	* National Market Access Immediately Available	YES
YES	* Defense against Competition from U.S.	YES
YES	* Access to a New Market Level	YES
YES	* No Base Working Capital Needed	NO
NO	* Excellent Financial, Marketing & Computer Skills Obtained Immediately.	YES
NO	* Improved Career Paths Available to Staff	YES
YES	* Complementary Services and Skills	YES
YES	* Stability through Dominance of Vertical Market	YES
NO	* Incorporation & Capital Acquisition Costs Avoided	YES

UTLAS	DISADVANTAGES	LSC
YES	* Risks Involved in Converting LSC to Entrepreneurial Style of Organization	YES
YES	* Absence of Normal Profit Level in New Business, at Least Initially	NO
YES	* Potential Difficulty in Accomodating LSC Level of Participating Library Involvement	YES
YES	* Investment of Management, Marketing, Financial, Computer Skills and Resources if Growth Objectives to be Achieved	NO
YES	* Possible Loss of Some Resource Sharing Arrangements With Regions e.g. Building and Trucks	YES

FIGURE 2

of a merger with UTLAS should be explored at the earliest possible time in order to implement this option. We include in Figure 2 opposite a brief summary of the major pros and cons of this concept from both points of view, as a preliminary guideline for this exploration.

This section has indicated that LSC faces an exceptional opportunity to serve a large market of public libraries in Ontario and across Canada by marketing its cost effectiveness, its professionalism, and its compatibility with a wide range of library computer systems. This more aggressive stance will require entrepreneurial skills, capital, and human resources which are already in short supply. It also requires establishing LSC as a commercial rather than a not-for-profit organization, in order to promote the needed changes in attitudes to make this work. Three optional ways of tackling this have been reviewed and a merger with UTLAS recommended. The potential for job creation in Ontario through merging these two operations is worthwhile, and we believe the resulting economies of scale will work to the benefit of libraries in dollar terms as well as in providing better assurance of the continued viability of essential services to many small and medium sized libraries.

If it is decided to forego the opportunity for growth and avoid the concomitant risks there is a more limited but still viable role to be carried out within the Province of Ontario, as a not-for-profit organization, serving many libraries, and continuing to grow but at a rate consistent with current human resource and capital constraints. We could not commend this course to a business client but can allow its possible merits in the practical circumstances of this particular case.

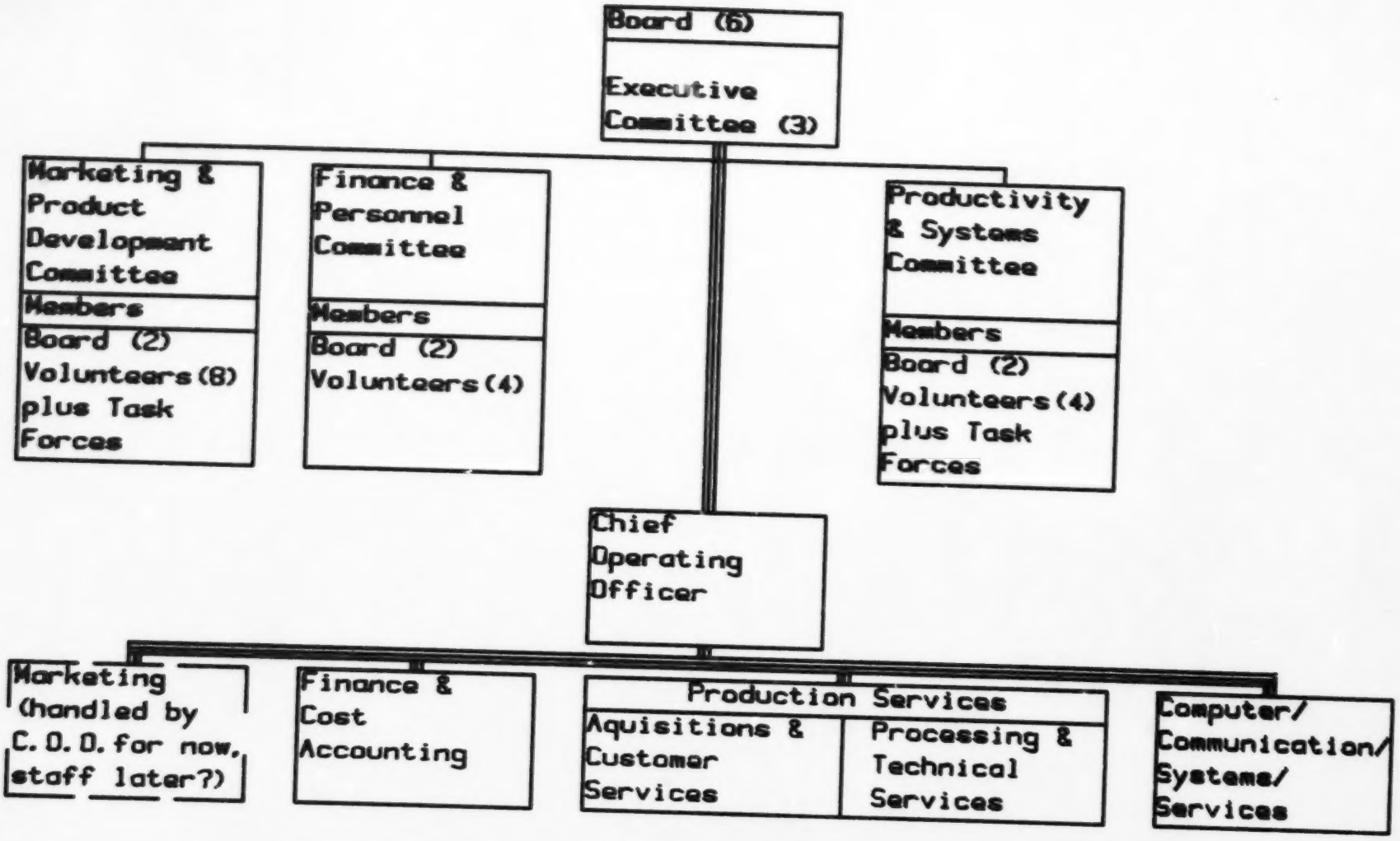
In either event, LSC can and should be made a free-standing and financially independent organization. The latter point has already been addressed. The organization structure required for the former is presented in the next section. Note that much of this would not be required under the UTLAS merger option, and that the related costs could thus be largely avoided as well as the need for supplementary working capital.

C. ORGANIZATION AS A FREE-STANDING ENTERPRISE

Although we believe that to organize LSC as a free-standing enterprise may be to limit the pace of growth and the final size which is attainable, it is one of the viable options. Accordingly, we set out here our view as to how this might best be done, taking into account the opinions obtained from the market survey. We have also been influenced by some ten years of experience, as a consultant, and as a volunteer board member, with the Hospital Medical Records Institute whose performance has already been noted above. Their experience is available to LSC as they tackle similar but less extreme conditions. The proposed organization of LSC for this particular option is now addressed.

1. A National Not-For-Profit Organization

In the long run LSC has a national role to play and the initial charter as a not-for-profit organization should reflect this as a capability and an intention. Even if initial marketing efforts at a national level are carried out through some arrangement with UTLAS, short of a merger, it will be important for LSC to begin to have a national focus and visibility. A national charter makes this more evident.



FUNCTIONAL VIEW OF PROPOSED BOARD, COMMITTEE, & MANAGEMENT STRUCTURE OF LSC
FIGURE 3

The board should initially be made up of three members of the Midwestern Board, and three new members chosen to meet the functional needs of LSC for direction. In the first few years, directors should be prepared to meet as a board on a quarterly basis to review a report prepared by the Chief Operating Officer on key areas of accomplishment and recommendations and objectives for the next quarter. Reports and recommendations from the committees should also be tabled for discussion and decision at this time. Initially this is likely to require about one full day per quarter: later, frequency can be reduced to two meetings per year, one of which should be dedicated to budgets and one to the annual meeting and elections.

Committees have been designed to address the main issues probably needing consistent attention over the next few years and define the areas where specific competence is needed by board members in order to chair them. Suggested organization and staffing of these committees and approximate time commitments are noted below, and presented graphically in Figure 3, opposite.

Executive Committee

Membership should be composed of the chairman of the Board, chairman of the Finance Committee, and one other board member, meeting once monthly to review progress and provide interim direction to the Chief Operating Officer and other committees as required.

Finance and Personnel Committee

Chaired by a qualified member of the board, supported by another qualified member as back-up or alternate and staffed by volunteers drawn from senior members of the library community, familiar with financial and personnel issues. This committee should also meet monthly desirably ahead of the Executive Committee to whom its recommendations should be addressed before submission to the board if required. This committee should also review requests and proposals arising from other committees before submission to the Executive Committee so that financial implications are independently judged before proposals are debated. This applies also to staff proposals from the management of LSC.

Productivity and Systems Committee

Chaired by a board member with credentials in systems and/or library technology, supported by a colleague with complementary qualifications, and staffed by volunteers from the library community, probably from the technical services area, this committee will pay regular attention to the productivity of human and computer resources and to the quality and timeliness of products and services. In addition, when new systems or concepts are in prospect this committee will form the necessary task force, set terms of reference, control progress and judge results. Such proposals will be subject to review by the Finance and the Marketing Committees, and approval by the Executive Committee, or the full board, as needed. Monthly meetings will initially be needed.

Marketing and Product Development Committee

Board representation and volunteer membership on this committee will follow the functional pattern already noted, and it will deal on a regular basis with customer service and complaints or requests for improvement. New marketing services or programmes, new products, new markets and other non-recurrent innovative issues should be handled by volunteer task forces managed as noted above. The decision route from Marketing should first be to Productivity and Systems to confirm technical feasibility, then to Finance and Personnel to confirm economic feasibility, then to the Executive Committee and then the Board. This committee will in turn review Finance and Productivity proposals for marketing impact prior to Executive Committee review. Again, about one day per month will be needed.

Internal Organization

The internal organization of LSC is set out in Figure 3 opposite Page 55, together with the above board and committee structure. This is self explanatory to a large degree. It is expected that staff from relevant areas will attend meetings of the appropriate committees and provide logistic support. However, it should be kept very clear that directions to staff should come only from the Chief Operating Officer, who in turn should be given direction only by the Chairman of the Board or his formally approved delegate. Otherwise, it can very rapidly be impossible to hold any one accountable for results.

Practical Politics

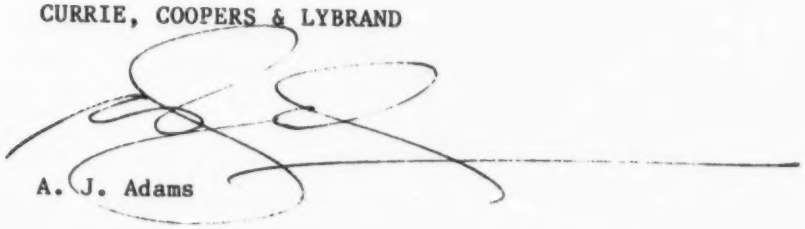
Under the above structure two board members will be retiring each year, and the board should agree on the qualifications needed to replace them in functional terms: finance, marketing, or computing, for example. The necessary candidates should be identified and their willingness to serve confirmed, their names approved by the Minister of Citizenship and Culture if this be necessary, and then the candidates submitted to the membership for election. Multiple or single candidates may be submitted for election but no candidate who fails to meet the functional requirements or who has not committed the time needed should be allowed to go forward.

This section has described a board, committee, and internal structure for LSC which can be effective in providing representation, and in capitalising on the availability of volunteers from the library community, while at the same time maintaining a small hard-working board tightly focussed on major issues. The board, the committees, the marketing, finance, and computer functions would likely become unnecessary under a merger with UTLAS, which is already very well equipped in these areas. For this reason, among others, we believe that the UTLAS solution can be economically beneficial to participating libraries as well as profitable for UTLAS. Nonetheless, the above structure is viable in its own right and if adopted closes no doors to eventual growth, and does not necessarily prevent future merger, although some avoidable costs will have to be written off.

This brings us to the end of our report. We trust that the findings will continue to have value for some time to come and are confident that our main operational recommendations will bear fruit as predicted given the level of commitment obtained so far from all parties at interest and our expectation that this commitment will continue. In the matter of organization, our preference should be clear: nonetheless, we have tried to present a fair, practical, implementable alternative for consideration, so that this can be debated in the knowledge that workable alternatives for either option are available. We ask only on behalf of LSC, its staff, and its customers that this debate should not be unduly protracted.

It has been a particular pleasure to be involved with this study of an organization that is almost unique in its function, and clearly unique in its level of success in a field where many others have failed. We have enjoyed exceptional support from the library community, from Ministry officials, from the Midwestern Board and from the management of LSC. We look forward to their early success in taking a "made in Ontario" service nation-wide.

CURRIE, COOPERS & LYBRAND



A. J. Adams